Electrodes, Fixed

S/S Plates or Rods

EM1791-001
Plate Type, Fixed Gap, 4mm Terminals

EM1792-001
Rod Type, Fixed Gap, 4mm Terminals

EM1792-101
Rod Type, Fixed Gap, Cables & Alligator Clips

Description:

These electrode sets are self contained and can be rested directly over the edge of a small beaker. They are complete with an MES threaded lamp socket that accepts a standard small torch globe to show that current is passing between electrodes. The rating of the globe may vary depending on the conductivity of the electrolyte and the experiment being conducted.

EM1791-001 has two stainless steel plates, 50mm wide x 75mm long, fixed at a separation of 5mm. A globe may be screwed into the socket provided to monitor the current flow. Two 4mm spin-free socket head terminals are provided for connection.

EM1792-001 has two stainless steel rods, 2mm diameter x 60mm long, fixed at a separation of 1.5mm so they can fit inside a 10mm diameter test tube. A globe may be screwed into the socket provided to monitor the current flow. Two 4mm spin-free socket head terminals are provided for connection.

EM1792-101 has two stainless steel rods, 2mm diameter x 60mm long, fixed at a separation of 1.5mm so they can fit inside a 10mm diameter test tube. A globe may be screwed into the socket provided to monitor the current flow. Two flexible cables terminated with alligator clips are fitted for connection.

Physical size Approx.	Length: 100mm	Width: 25	Height: 90	Weight: 100g

General Use Of Instrument:

These instruments are used to perform experiments that involve the checking and measuring the electrical conductivity in liquids (electrolytes). The electrode insulating support plate normally rests over the mouth of a small beaker whilst the stainless steel rods or plates hang into the solution under test. In the case of the small rod type construction, the rods can hang inside a 10 mm diameter test tube for experiments requiring very small samples. AC or DC power (depending on the type of experiment) is applied to the electrodes from a power supply or a battery. If the resistance of the solution DECREASES, the lamp will illuminate more brightly. If the solution does not easily conduct electricity, the lamp will be off.

Electro-Deposition (Electroplating):

Experiments in electro-deposition can be performed by displacing metallic elements from solutions and depositing them on the stainless steel plates or rods.
The deposits usually will not adhere to the stainless steel electrodes so they can be wiped clean at the end of an experiment.
Differences between AC and DC current can be explored relating to electrolysis, deposition and electroplating.
The Electrode Set with the 'plate' type construction (EM1791-001) permits surface area and plate separation dimensions to be measured. This is often used for calculations and for current density studies in more advanced experiments.

Always Wash The Instruments Thoroughly Before Storing Away.

Designed and manufactured in Australia